DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 13.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011648 Address: 333 Burma Road **Date Inspected:** 22-Jan-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Oregon Iron Works Clackamas, Or. **Location:** Clackamas, OR

CWI Name: M. Gregson, J. Salazar **CWI Present:** Yes No **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No N/A No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Hinge K Pipe Beams

Summary of Items Observed:

The Quality Assurance Inspector Sean Vance arrived on site at Oregon Iron Works, Inc (OIW) in Clackamas, OR, to randomly observe the in process welding of the Hinge K Pipe Beam assemblies. The QA Inspector arrived on site to randomly observe the OIW Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

OIW Fabrication Shop-Bay 6 (ESW Overlay Process)

Hinge-K Pipe Beam Fuse Assembly 120A-8

The QA Inspector witnessed welder WID #F17, Mr. Igor Frolov setting up to performing electro slag welding (ESW) on the third layer welding passes. The QA Inspector noted that a stationary torch was set up and pre-heat was being applied to the Fuse, to achieve the minimum 70 degrees Fahrenheit (21 C). The QA Inspector later witnessed Mr. Frolov performing the ESW. The QA Inspector randomly noticed QC Inspector Jose Salazar was present, to verify in-process welding parameters (amps/volts) and monitor in-process continuous pre-heat temperatures. QC Inspector Salazar explained to the QA Inspector that welding amperage was previously recorded at 1300 amps/25.7 volts, travel speed at 267mm/min. and a pre-heat temperature recorded at approximately 150 degrees Fahrenheit (66 C). The QA Inspector verified the welding parameters and the minimum pre-heat temperatures were in compliance with the applicable WPS 7003. The QA Inspector verified Mr. Igor Frolov was currently qualified for this welding process and position. The QA Inspector noted that the ESW being performed appeared to be in compliance with WPS 7003.

The QA Inspector was informed by swing shift QC Inspector Gary Mundt that no welding will be performed on this Fuse 120A-8.

WELDING INSPECTION REPORT

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Material, Equipment, and Labor Tracking (MELT)

QA Inspector Sean Vance performed a verification of material, personnel and equipment involved with the project.

The QA Inspector observed at Oregon Iron Works: 5 OIW production personnel and 2 QC Inspectors.

The QA Inspector noted that no work was performed at AG Machine shop.

The QA Inspector noted that no work was performed at OIW Vancouver paint shop.





Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Vance,Sean	Quality Assurance Inspector
Reviewed By:	Adame,Joe	QA Reviewer